**PATENT** 

Docket No.: 100201724-6

Appl. Ser. No.: 10/697,659

**IN THE CLAIMS**:

Please find below a listing of all of the pending claims. The statuses of the claims are

set forth in parentheses.

1. (Canceled).

2. (Previously presented) The system according to claim 10, wherein said

characteristic of said cooling fluid comprises at least one of volume flow rate, velocity and

direction of cooling fluid removal.

3. (Previously presented) The system according to claim 10, further comprising:

at least one return controller operable to control at least one of said returns, wherein

said at least one return controller is configured to substantially independently control said

returns to thereby substantially independently vary said characteristic of said cooling fluid

removal.

4. (Original) The system according to claim 3, further comprising:

a plurality of sensors configured to sense an environmental condition within said data

center, said environmental condition including at least one of temperature, humidity,

pressure, and cooling fluid flow rate, wherein said at least one return controller is configured

to substantially independently control said returns in response to said measured

environmental condition.

5-9. (Canceled)

2

Docket No.: 100201724-6 **PATENT** 

Appl. Ser. No.: 10/697,659

10. (Currently amended) A cooling system for cooling racks in a data center, said system comprising:

a cooling device for circulating cooling fluid in said data center, said cooling device including a fan;

a plenum having a plurality of returns and an outlet, wherein said outlet of said plenum is in fluid communication with said fan, wherein said plurality of returns are configured for removing said cooling fluid from said data center and are operable to vary a characteristic of said removal of cooling fluid through said returns;

a self-propelled mobile device configured to travel around the racks to sense at least one environmental condition within said data center, wherein said sensed at least one environmental condition is employable by the cooling device in circulating cooling fluid in said data center.

11. (Previously presented) The system according to claim 10, wherein said return controller is operable to substantially independently control said returns in response to said relayed data associated with said at least one environmental condition.

12-23. (Canceled).

24. (Currently amended) A method of cooling a plurality of racks in a data center, said method comprising:

activating a cooling system and opening a plurality of returns, said returns being configured to remove cooling fluid from various locations of said data center;

receiving temperatures from a self-propelled movable device configured to detect at least one environmental condition at various locations of said data center;

Docket No.: 100201724-6 **PATENT** 

Appl. Ser. No.: 10/697,659

determining whether at least one of said sensed temperatures and said received temperatures are within a predetermined temperature range; and

varying at least one of said returns in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.

25-36. (Canceled)

37. (Currently amended) An apparatus for cooling a plurality of racks in a data center, said apparatus comprising:

means for activating a cooling system and opening a plurality of returns, each of said returns being configured to remove cooling fluid from various locations of said data center;

means for receiving temperatures from a self-propelled movable device configured to detect at least one environmental condition at various locations of said data center;

means for determining whether at least one of said sensed temperatures and said received temperatures are within a predetermined temperature range; and

means for varying at least one of said returns in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.

38-49. (Canceled)

50. (Currently amended) A computer readable medium on which is embedded computer software, said software comprising executable code for performing a method of cooling a plurality of racks in a data center, said method comprising:

activating a cooling system and opening a plurality of returns, each of said returns being configured to remove cooling fluid from various locations of said data center;

PATENT Docket No.: 100201724-6

Appl. Ser. No.: 10/697,659

receiving temperatures from a <u>self-propelled</u> movable device configured to detect at least one environmental condition at various locations of said data center;

determining whether at least one of said sensed temperatures and said received temperatures are within a predetermined temperature range; and

varying at least one of said returns in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.

- 51. (Previously presented) The system according to claim 3, wherein said mobile device is further configured to relay data associated with said at least one sensed environmental condition to said at least one return controller.
- 52. (Previously presented) The system according to claim 10, wherein said cooling device is configured to vary at least one of a volume flow rate and temperature of the cooling fluid delivered to the racks in response to the sensed at least one environmental condition.
- 53. (Previously presented) The system according to claim 10, wherein the plurality of returns includes fans configured to draw cooling fluid from the data center, wherein the fans are movable to vary a direction of cooling fluid removal.
- 54. (Previously presented) The system according to claim 10, wherein the plurality of returns are independent of the racks.
- 55. (Previously presented) The system according to claim 10, wherein the mobile device is further configured to detect the at least one environmental condition at various heights of the data center.

**PATENT** Docket No.: 100201724-6 Appl. Ser. No.: 10/697,659

56. (Previously presented) The method according to claim 24, wherein the step of varying said removal of said cooling fluid from said racks comprises varying at least one of volume flow rate, velocity and direction of cooling fluid removal.

- 57. (Previously presented) The method according to claim 24, wherein the step of varying said removal of said cooling fluid from said racks comprises substantially independently controlling said plurality of returns to thereby substantially independently vary said removal of said cooling fluid from said racks through said plurality of returns.
- 58. (Previously presented) The method according to claim 24, further comprising: relaying data associated with said at least one sensed environmental condition to a return controller configured to control the plurality of returns.
- 59. (Previously presented) The method according to claim 24, further comprising: varying the cooling system in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.
- 60. (Previously presented) The apparatus according to claim 37, wherein the various locations of said data center comprises a plurality of racks.
- 61. (Previously presented) The apparatus according to claim 37, wherein the means for varying said removal of said cooling fluid from said racks comprises means for varying at least one of volume flow rate, velocity and direction of cooling fluid removal.

**PATENT** Docket No.: 100201724-6 Appl. Ser. No.: 10/697,659

62. (Previously presented) The apparatus according to claim 37, wherein the means for varying said removal of said cooling fluid from said racks comprises means for substantially independently controlling said plurality of returns to thereby substantially independently vary said removal of said cooling fluid from said racks through said plurality of returns.

- 63. (Previously presented) The apparatus according to claim 37, further comprising: means for relaying data associated with said at least one sensed environmental condition to a return controller configured to control the plurality of returns.
- 64. (Previously presented) The apparatus according to claim 37, further comprising: means for varying the cooling system in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.
- 65. (Previously presented) The computer readable medium according to claim 50, wherein the various locations of said data center comprises a plurality of racks.
- 66. (Previously presented) The computer readable medium according to claim 50, further comprising:

varying at least one of volume flow rate, velocity and direction of cooling fluid removal.

**PATENT**Docket No.: 100201724-6
Appl. Ser. No.: 10/697,659

67. (Previously presented) The computer readable medium according to claim 50, further comprising:

substantially independently controlling said plurality of returns to thereby substantially independently vary said removal of said cooling fluid from said racks through said plurality of returns.

68. (Previously presented) The computer readable medium according to claim 50, further comprising:

relaying data associated with said at least one sensed environmental condition to a return controller configured to control the plurality of returns.

69. (Previously presented) The computer readable medium according to claim 50, further comprising:

varying the cooling system in response to at least one of said sensed and received temperatures being outside of said predetermined temperature range.